

# **Jaine Department of Transportation**



# Statewide Transportation Improvement Program

## Federal Fiscal Years 2004-2005-2006

The Bureau of Project Development led preparation of this document supported by many other Bureaus and Offices throughout the Department. Additional copies may be obtained by contacting David Nicholas, Capital Resources Manager, telephone (207) 624-3410, or e-mail <a href="mailto:David.Nicholas@maine.gov">David.Nicholas@maine.gov</a>. A copy can also be found online at <a href="http://www.state.me.us/mdot/mainhtml/publication.htm">http://www.state.me.us/mdot/mainhtml/publication.htm</a>.

## **TABLE OF CONTENTS**

GLOSSARY OF TERMS AND ABBREVIATIONSii  PROGRAM AND PRODUCTION SUMMARYiv
A BIG PICTUREvii
SECTION I - Federal Fund Source Summary (Green Pages)  * Obligation summary for restricted fund sources  * Obligation summary for individual projects grouped by fund source then by municipality
SECTION II - Project Detail Listing (White/Buff Pages)  * (White Pages) Project work not yet started, obligation schedule, grouped by municipality  * (Buff Pages) Project work not yet finished, obligations completed, grouped by municipality  * (White Pages) Indian Reservation Roads Program, grouped by project number
SECTION III - MPO Project Detail Listing (Pink Pages)  * Funds remaining to be obligated grouped by municipality

\* Those projects are also included within Section II listing

### **SECTION IV - FTA Project Detail Listing (Yellow Pages)**

- \* Project cost summaries grouped by funding section
- \* These projects are also included within Section II listing

### **SECTION V - Clean Air Conformity Analysis (Blue Pages)**

- \* Can stand alone, has its own title page, table of contents and introductory material
- \* It is included here in response to the Clean Air Act and the Clean Air Act Amendments

## **GLOSSARY OF TERMS AND ABBREVIATIONS**

**AC** - Advance Construction, an innovative FHWA financing technique allowing a State to initiate a project using non-federal funds while preserving the project's future eligibility for Federal-aid funds.

AVCOG - Androscoggin Valley Council of Governments

**Base Case** - A "Yes" in this field indicates that a project was contained in the biennial funding element of a conforming Transportation Improvement Program (TIP), or was "grandfathered" under Section 176(c)(3) (B)(i) of the CAAA. Such projects do not require further analysis under the conformity provisions of the CAAA.

**BR or BH** - Bridge Replacement or Bridge Rehabilitation, a federal funding source for projects to improve bridges that are structurally deficient and/or functionally obsolete

#### CAAA - Clean Air Act Amendment

- **CE** Categorical Exclusion, a required NEPA document for project activity meeting certain definitions and not having significant environmental effects.

  OR
- CE Construction Engineering, all project engineering work following the beginning of construction
- CM Congestion Mitigation/Air Quality, a federal funding source for eligible projects benefiting air quality
- **CN** Construction phase of project work
- **EA** Environmental Assessment, a required NEPA document for project activity that does not meet CE definitions, but that likely will not require development of a full, formal EIS. The EA typically ends with a FONSI.

**EIS** - Environmental Impact Statement, a required NEPA document for project activity deemed to have significant environmental impacts. An EIS is the result of a comprehensive study, undertaken on only a few large projects.

EMDC - Eastern Maine Development Corporation

**Exempt** - A "Yes" in this field indicates that this project is representative of one of the categories that do not require analysis under conformity provisions of the CAAA.

**FBD** - Ferry Boat Discretionary, a federal funding source for ferry boats and terminal facilities

FEMA - Federal Emergency Management Agency

FHWA - Federal Highway Administration

**FONSI** - Finding of No Significant Impact, the result of a project EA where an EIS is not required.

FTA - Federal Transit Administration

**FFY** - Federal Fiscal Year (Begins October 1<sup>st</sup>)

**GPCOG** - Greater Portland Council of Governments

**Highway Improvement** - Major rehabilitation or reconstruction of a roadway

IM - Interstate Maintenance, a federal funding source for the federal aid interstate system Level I Highway Resurfacing – No longer applied, see PPM below

**Level II Highway Resurfacing** - Resurfacing a roadway of modern design for the second time after rehabilitation, or reconstruction. Work is concentrated on the roadway surface, but likely includes drainage and roadside safety improvements and may involve innovative pavement treatments.

**Level III Highway Resurfacing** - Resurfacing a roadway of modern design when Levels I and II will not suffice. May include rebasing shoulders and short sections of core, extensive drainage work and safety upgrades.

**MPO** - Metropolitan Planning Organization, a federally designated planning organization responsible for carrying out a continuous, comprehensive, and cooperative transportation planning process for urbanized areas with populations of 50,000 or more. Maine has 4 MPOs:

 $\underline{ATRC}$  - Androscoggin Transportation Resource Center, which is affiliated with  $\overline{AVCOG}$ 

<u>BACTS</u> - Bangor Area Comprehensive Transportation System, which is affiliated with EMDC

<u>KACTS</u> - Kittery Area Comprehensive Transportation Study, which is affiliated with SMRPC

**LACTS** – renamed, see ATRC above.

<u>PACTS</u> - Portland Area Comprehensive Transportation Committee, which is affiliated with GPCOG

- **NEPA** National Environmental Policy Act of 1969, established a national policy for protecting the environment. A NEPA document (CE, EA, or EIS) must be developed for each federal aid project.
- **NH** National Highway, a federal funding source for transportation projects on the Interstate System and most other roadways classified Principal Arterial
- **Obligation** The commitment of federal funds to a project prior to reimbursement of state/local expenditures.
- "Restricted Source" is a fund source restricted by program-wide, annual obligation limits
- "<u>Un-Restricted Source</u>" is a fund source <u>not</u> restricted by program-wide, annual obligation limits
- "<u>Future Obligation</u>" is project funding that has been programmed, but scheduling has not been finalized.
- **PCE Prec**onstruction Engineering, all aspects of project engineering that come before the construction phase.
- **PE** Preliminary Engineering, early project engineering, usually preceding the completion of preliminary design plans; <u>or</u> as used by FHWA, all project engineering prior to beginning construction
- PIN Project Identification Number
- **PPM** Pavement Preventative Maintenance is applying the right treatment to the right pavement at the right time. The PPM approach is to maintain optimum pavement condition by applying lighter, less expensive treatments earlier in the pavement's life cycle and more frequently thereafter. These cost effective treatments include crack sealing, micro-surfacing, foamed asphalt and Level II resurfacing.
- **ROW** or **R/W R**ight of **W**ay phase of project work done in conjunction with land acquisition or easements.
- RTAC Regional Transportation Advisory Committee
- SMRPC Southern Maine Regional Planning Commission
- STIP Statewide Transportation Improvement Program
- **STP** Surface Transportation Program, a federal funding source for transportation projects associated with any public highway segment not functionally classified as "rural minor collector", or "local road"
- **TEA 21 Transportation Equity Act for the 21st Century**

## PROGRAM AND PRODUCTION SUMMARY

Maine's Statewide Transportation Improvement Program (STIP) is prepared every 2 years as directed by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). The document presented here spans Federal Fiscal Years 2004-2005-2006, beginning October 1, 2003. It includes funding schedules developed for all projects that have remaining federal financial commitments and lists as well additional federal aid projects remaining to be completed, but for which all needed federal funds have already been committed.

<u>Funding</u> schedules detailed within this STIP propose to utilize resources provided through a number of federal transportation programs matched by allocations from the State's Highway Fund, General Fund, Highway Fund Bonds, General Fund Bonds, and limited funding from municipalities and other sources. These financial resources are for the most part anticipated and not yet certain.

Going forward, beyond 2003, there are a number of uncertainties as to the nature and amount of capital improvement funding that may be available to the MaineDOT. First and foremost, federal funding authorizations included in the current six-year Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) expire on September 30.

2003 and at this time, the course of federal transportation reauthorization remains uncertain. Secondly, our program assumes approval by Maine voters of both Highway and General Fund Bonds. All these deliberations and decisions will not be certain until after the STIP has been submitted for approval and each will have a direct bearing on delivery of this program.

#### **Implications of Federal Transportation Reauthorization:**

The proposed Federal Fiscal Year 2004 budget may carry a spending ceiling of \$29.3 billion for the Federal-Aid Highway Program, which could mean a reduction of \$10 million or more for Maine. With a more-than-\$300-billion federal deficit, international tensions, and increased spending on transportation security, implications for growth in federal transportation funding remain unclear. Despite this uncertainty, there is widespread concurrence on the need to increase transportation spending. Therefore, this STIP projects incremental growth in funding over present levels.

Maine's Motor Fuel Tax Indexing law remains on the books for at least another 2 years, but this still does not provide enough revenue to match all the federal funds that are expected to be available. Every dollar invested in transportation infrastructure on federally eligible projects carries about 20 cents in matching non-federal funds. This STIP also relies on \$75 million in Highway and General Fund Bonds to maximize federal investment throughout Maine's economy over the next 3 years. These Bond requests will be presented to Maine voters in 2003.

MaineDOT has projected the availability of state and federal funds based on experience over the last 2-3 years and reasonable expectations for the coming 2-year period. These projections are shown in the table below:

Estimated Levels of No (millions of dollars)	ew Fundin	g for FY 20	04-2005				
Program Area	Federal	Federal Discretion <sup>1</sup>	State (HF) <sup>2</sup>	State (GF)	(HF-GF) Bond	Local / Others	Total
Highways & Bridges	280.0	40.0	111.4		42.0	10.0	\$483.4
Passenger Transportation	83.9	2.8	1.6	1.0	17.1	13.8	\$120.2
Freight Transportation	2.3		0.6		15.6		\$18.5
TOTAL	\$366.2	\$42.8	\$113.6	\$1.0	\$74.7	\$23.8	\$622.1

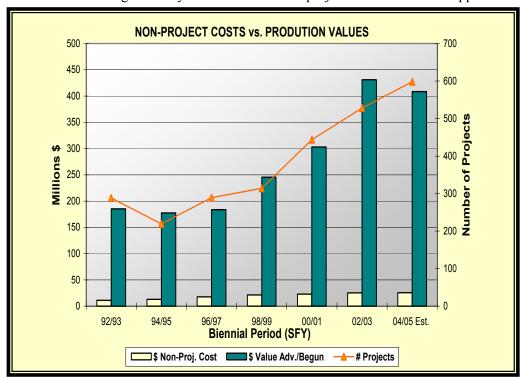
- 1. Includes High Priority Project, Bridge Discretionary, Ferry Boat Discretionary, etc.
- 2. Assumes \$47.5 million in Motor Fuel Tax Indexing.

**Project cost containment**, just like the realization of adequate funding levels outlined above, is critical to successful program delivery. Maine's climate, size, location and the volatility of the costs of certain construction materials make predicting the future costs for construction projects difficult. Most recently for example, the price of liquid asphalt and other petroleum products, such as fuel oil, has risen sharply. Also, MaineDOT, as with any large organization, must be continually vigilant to minimize administrative and engineering costs, ensuring that as much as possible of every dollar spent goes toward the labor, equipment and materials needed to build high quality transportation projects.

Program administration costs, as can be seen in the chart below, are holding relatively flat, while production values over the last 4 program periods have increased significantly. These are the non-project costs needed to support and

enable program delivery.

We are also seeing a positive trend in recent years with production of more construction value vs. engineering and R/W completed costs for projects. Experience over the past 2 decades, since detailed electronic record keeping began, shows construction value at 78% of total cost, with PE & CE costs 18% and R/W 4%. Since January 2000, these project cost relationships have improved to 82%, 14% and 3% respectively, a positive trend similar to non-project the costs shown to the right.



**Effective programming**, in addition to, acquisition of financial resources and their efficient utilization as previously summarized, is actually the start of the process assuring that transportation goals and priorities are appropriately addressed. This is not done quickly. System data is gathered on a continuous basis and MaineDOT solicits public involvement throughout its planning and project development processes. There were two opportunities for the public to influence specific program content for the current period long before final decisions were made.

The first opportunity was during the development of the Six-Year Plan where projects are selected with the intent that they will be funded in the next three Biennial Transportation Improvement Programs (BTIPs). Project selection priorities in the Six-Year Plan were based, in part, on advice from the Regional Transportation Advisory Committees (RTACs) with guidance from the Regional Planning Commissions. The RTACs are citizen based, represent various regional transportation interests, and are a vital link between the Department and the public. In addition, MaineDOT held seven regional public meetings in late 2002 to present a draft of the Six-Year Plan and to solicit direct public comment.

The second opportunity for the public to influence this program was through a project solicitation mailed to all Maine municipalities, county commissions, Native American nations and tribes, and State agencies. This solicitation requested each entity list project needs within their jurisdiction and put those needs in priority order. MaineDOT compiled the project requests and considered them during the development of the BTIP.

Less direct, but certainly just as vital in developing a responsive, yet constrained program of projects is the separate public review and comment period for each of MaineDOT's 4 major Plan/Program elements. The outline below provides a snapshot of their sequence, content and relationship:

<u>The 20 Year Transportation Plan</u> is developed with input and guidance from Maine's Regional Transportation Advisory Committees (RTACs), the Governor and other elected officials, as well as the public, through a series of public meetings. It serves to guide MaineDOT decision-making in the planning, development and preservation of Maine's multimodal transportation system.

The 6 Year Transportation Improvement Plan begins to crystallize Maine's transportation priorities, providing more project specific definition and funding needs. It too, like the 20 Year Plan, is developed with input and guidance from an array of external stakeholders. The 6 Year Plan is updated every 2 years.

The 2 Year Biennial Transportation Improvement Program (BTIP) gives details of specific projects, matching needs established in the 6 Year Plan with funding levels anticipated for the coming 2 year period. It is presented to the public in a series of meetings and then to the Legislature for funding approval, but final approval of any bond funding rests with Maine's voters. Expenditure of approved funds and completion of all projects spans more than one biennial period.

The Statewide Transportation Improvement Program (STIP) is a required document for the expenditure of federal funds and follows development of the BTIP. The STIP provides delivery timeframes for all remaining BTIP projects using federal funding limitations established by Congress as a guideline. It must be approved by federal agencies before any project work can be started and it must demonstrate that delivery of our program will conform to federal clean air standards.

<u>Partnerships</u> are important to the development and execution of these plans and programs. MaineDOT relies on partnerships with federal agencies such as the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA), as well as Metropolitan Planning Organizations (MPOs), state and federal environmental resource agencies, municipalities, and other private and public entities to secure the funding and delivery of transportation projects.

We work closely with our federal transportation partners to maximize available federal funds in a way that meets both federal and State transportation goals. Our most recent programming considers FHWA's "Vital Few Goals" (shown here) a guide during planning and project selection targeting limited resources for the federal program period beginning October 2003.

#### FHWA's "Vital Few Goals":

#### Safety

- Reduce fatalities involving roadway departure crashes by 10%.
- Reduce intersection fatalities by 10%.
- Reduce pedestrian fatalities by 10%.

#### Environmental Stewardship & Streamlining

- Ensure the environmental quality of transportation decision-making.
- Increase ecosystem and habitat conservation.
- Improve the efficiency of the environmental process.

#### **Congestion Mitigation**

- Mitigate overall impacts of congestion through effective local partnerships.
- Reduce work zone delay.
- Reduce traffic incident delay.

Maine has four federally designated MPOs primarily responsible for transportation planning and capital improvement decision-making within their boundaries. These areas are the urbanized areas surrounding Bangor, Kittery, Lewiston-Auburn and Portland. MaineDOT works closely with its MPO partners in project scoping, selection, estimation, and development and also includes their TIPs by reference in this STIP.

MaineDOT develops formal partnerships with municipal organizations in the funding and design of many projects. A primary element of this is the Locally Administered Project (LAP), such as the one pictured below in Portland.

LAPs offer municipalities opportunities to coordinate a MaineDOT project with local initiatives, expedite a project and subsidize local forces with project funds. Training and certification are provided to municipal officials wishing to participate. The 2004-2005 BTIP added over \$23 million in funds from local governments and other organizations to the 2003-2004-2005 STIP.

MaineDOT also partners with State and Federal Environmental Resource Agencies. Monthly meetings are held to discuss ongoing projects to identify and resolve critical issues early in the process. This partnership and all the others highlighted in earlier paragraphs enable efficient and



effective delivery of a responsibly developed, financially constrained transportation improvement program.

<u>In summary</u>, this STIP reflects the goals, objectives, and strategies articulated in MaineDOT's Twenty-Year Transportation Plan, the transportation priorities of the Six-Year Transportation Improvement Plan, needs as expressed by our many partners and the financial constraints anticipated through the 2004-2005 BTIP. Individual project selections were based upon safety needs, economic benefits, environmental stewardship, multimodal integration, local support and MaineDOT's Resource Allocation Policy outlined below:

#### MaineDOT Resource Allocation Policy:

#### 1. Meet system preservation needs.

Good management of a large system of capital facilities like the state's transportation system requires a continuing investment in system preservation.

#### 2. Invest in system modernization needs for all modes.

When system preservation needs have been addressed, MaineDOT will invest its resources in the significant number of transportation infrastructure modernization needs. A safe and efficient transportation system is key to the state's economic growth.

#### 3. Invest in transportation system management and travel demand management alternatives.

In today's economic and environmental climate, the demand for transportation mobility must be addressed, to the extent possible, through actions that maximize the efficiency of our existing transportation infrastructure.

#### 4. Invest in all modes of transportation.

MaineDOT must continue its efforts to provide a "seamless" interconnection between all modes, both for passengers and freight. Mobility options such as trains, buses, planes and ferries can be efficient, environmentally sensitive and cost-effective modal choices.

#### 5. Target limited resources for new capacity to the highest priorities.

Funding for new capacity projects is extremely limited. Only those projects supporting state and regional transportation goals and strategies and those that have demonstrated merit and strong public support will be considered.

